

# SIGMA<sup>®</sup>

## BIOCHEMICALS ORGANIC COMPOUNDS AND DIAGNOSTIC REAGENTS

### TO PLACE AN ORDER

Telephone 800-325-3010  
Fax 800-325-5052

### CUSTOMER SERVICE

800-325-8670  
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### GENERAL INFORMATION

INDUSTRIAL  
AEROSOL  
KITS AND  
SUPPLIES

NEW  
PRODUCTS

OTHER  
PRODUCTS  
CATEGORIES

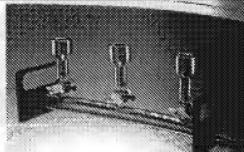
FOOD  
CULTURE

INDUSTRIAL  
BIOLOGICAL  
SUPPLIES

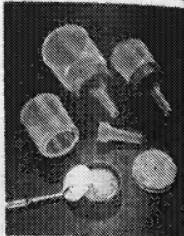
IMMUNO  
TEST KITS

PROTEIN  
PEPTIDES

ANALYTICAL  
TEST



**VACUUM MANIFOLD, Nalgene**  
**M 4664** Stainless steel with PTFE  
stopcocks. Designed with three vacuum ports  
with a two-way valve and vent. Barbed fitting  
3/8" (9.5 mm) I.D. tubing.  
Autoclavable

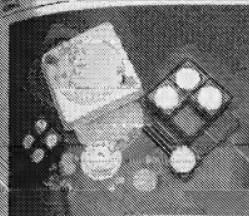


**ANALYTICAL TEST FILTER FUNNEL, Nalgene**  
Sterile, with 47 mm nitrocellulose membrane. For  
backlit polyacrylamide with rotatable safety cap.

2256	Membrane: 0.2 $\mu$ m, white Funnel capacity: 100 ml	50 / pk
2286	Membrane: 0.2 $\mu$ m, white Funnel capacity: 250 ml	50 / pk
2181	Membrane: 0.45 $\mu$ m, gridded Funnel capacity: 100 ml	50 / pk
2411	Membrane: 0.45 $\mu$ m, gridded Funnel capacity: 250 ml	50 / pk

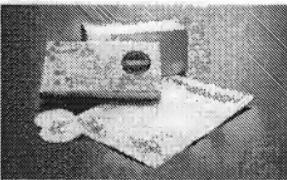
## INTRODUCTION

Product	Pore Size (μm)	Diameter (mm)	PIg	Price US \$
-Miltipore membranes are Triton-free and have much lower water extractables than MF membranes.				
M 9395	0.22	13	100	52.50
M 9396		25	500	45.50
M 9446		47	100	68.50
M 9770		142	50	141.50
M 9395	0.45	13	100	48.40
M 0146		25	100	45.50
M 0271		47	100	73.10
M 0521		142	50	155.50



**FILTER MEMBRANES, NITROCELLULOSE**  
 Biologically inert nitrocellulose membranes containing  
 a small amount of cellulose acetate for improved  
 strength.  
 Autoclavable to 121°C; can tolerate 75°C.  
 Chemically compatible with most acids and bases,  
 hydrocarbons, non-polar liquids.  
 The immobilon-NC in the Electrophoresis  
 Equipment section for nitrocellulose blotting  
 membranes.  
 Millipore and TF-Millipore are registered trademarks of  
 Millipore Corp.

Product	Pore Size (µm)	Diameter (mm)	PIg	Price US \$
All porous membranes have water extractables <5%, including a Triton®				
W3007	0.22	13	100	45.35
W3008		25	100	45.35
W3005		47	100	65.95
W3009		142	50	162.75
W30061		293	25	195.00
W3005	0.45	13	100	44.94
W3006		25	100	37.11
W3013		47	100	65.95
W3010		142	50	162.75
W30040		293	25	195.00
W3023	0.65	25	100	59.55
W3047		47	100	77.27
W3072	0.8	25	100	46.36
W3007		47	100	77.27
W3014		293	25	195.00
W3021	5	13	100	44.34
W3046		25	100	46.36
W3071		47	100	82.45
W3009	6	13	100	44.34
W3021		25	100	50.50
W3046		47	100	82.45
W3071		142	50	175.25



## FILTER MEMBRANES FOR MICROBIOLOGICAL ANALYSIS

**Filter type HA.** 0.45  $\mu\text{m}$  pore size, is designed to give complete retention and maximum recovery of total coliforms and fecal coliform bacteria. Complies with applicable U.S. EPA Standard methods and ASTM specifications for membrane filters used for drinking water analysis.

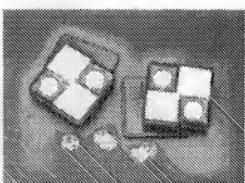
Filter type HC, 0.7  $\mu\text{m}$  pore size, is designed for improved recovery of stressed fecal coliform organisms, especially those found in chlorinated effluents. The larger pore size permits faster filtration if the water sample has a higher particulate burden. Both filters are Millipore mixed cellulose esters (CA + CN).

S-PAK: filter membranes, sterile, individually sealed

<b>Z35,553-4</b>	0.45 µm pore size (HA filter)	200 / pkg	80.00
	White with black grid surface	1,000 / pkg	280.00
<b>Z35,554-2</b>	0.45 µm pore size (HA filter)	1,000 / pkg	482.00
	Black with white grid surface		
<b>Z35,555-0</b>	0.7 µm pore size (HC filter)	200 / pkg	80.00
	White with black grid surface	1,000 / pkg	280.00
S-Kit: filter membrane plus absorbent pad, sterile, individually sealed, packed in 100's in dispenser tubes			
<b>Z35,556-9</b>	0.45 µm pore size (HA filter)	1,000 / pkg	310.00
	White with black grid surface		
<b>Z35,557-7</b>	0.7 µm pore size (HC filter)	200 / pkg	82.00
	White with black grid surface	1,000 / pkg	380.00
<b>Z35,558-5</b>	Absorbent pads, 47 mm diameter, without membrane, for use as filter supports	100 / pkg	25.00
		200 / pkg	35.50

## FILTRATION

PRODUCT NUMBER	ITEM	DESCRIPTION	QTY	PRICE
Z29,082-3	FILTER MEMBRANES, NYLON	NYLON filters are naturally hydrophilic and no wetting agents are used in manufacture. With an extractable level <0.0015 mg/cm <sup>2</sup> , they are ideal for HPLC solvent and sample preparation. Because of high non-specific binding, they are not recommended for protein solutions.	100 / pkg	49.10
Z29,080-7		Autoclavable, unaffected by temperatures up to 180°C.	100 / pkg	73.35
Z29,081-5		Compatible with aqueous and most organic solvents.	100 / pkg	54.50
Z29,079-3			100 / pkg	73.35
Z29,078-5			25 / pkg	43.75



## **FILTER MEMBRANES, ISOPORE TRACK-ETCHED POLYCARBONATE**

**Isopore**®  
Unique membrane for collection of particulates for inspection by light or electron microscopy. Isopore membranes have a flat, glassy, non-staining surface. They are hydrophilic, with a PVP wetting agent, and autoclavable.

Thickness: 10±0.5  $\mu$ m

Color: white

Manufacturing process produces a membrane with precise pore size and narrow pore size distribution for accurate separations by particle size.

P 9199	Pore size: 0.2 µm Diameter: 25 mm	100 / pkg	42.25
P 9324	Pore size: 0.2 µm Diameter: 47 mm	100 / pkg	60.80
P 9449	Pore size: 0.4 µm Diameter: 25 mm	100 / pkg	42.25
P 9574	Pore size: 0.4 µm Diameter: 47 mm	100 / pkg	60.80
P 9699	Pore size: 5.0 µm Diameter: 25 mm	100 / pkg	54.60
P 9824	Pore size: 5.0 µm Diameter: 47 mm	100 / pkg	83.45

#### **FILTER MEMBRANES, FLUOROPORE AND MITEX POLYTETRAFLUOROETHYLENE**

(PTFE)  
Membranes of PTFE are biologically inert and have broad chemical compatibility.  
Fluoropore and Mtex are registered trademarks of Millipore Corp.

Product Number	Pore size, $\mu$	Circle diam., in.	Area, in. <sup>2</sup>	Price, U.S. \$
Fluoropore PTFE membranes have a high-density polyethylene backing to improve handling. Compatible with solvents, acids, and bases (except inorganic hydrocarbons above 80°C).				
P 0325	0.2	25	100	177.25
P 0456		47	100	220.00
P 0575	0.5	13	100	149.00
P 0700		25	100	188.00
P 0825		47	100	230.00
P 9549	1.0	25	100	185.50
P 9200		47	100	244.75
Unfluorinated Fluoropore PTFE membrane (no polyethylene backing) with carbon ends have high-temperature aromatic sulfides.				
P 1200	0.5	47	100	297.00
Metal PTFE membranes are unfluorinated and hydrophobic. Before use with aqueous solutions, they must be pre-wet with a 0.05 Molar NaOH.				
P 1675	5	47	100	276.00

**FILTER MEMBRANES, DURAPORE  
POLYVINYLDENE DIFLUORIDE**

**(PVDF)**  
Durapore PVDF membranes are ideal for sterilization and clarification of protein solutions. Protein binding is on the order of  $1 \text{ }\mu\text{g}/\text{cm}^2$ , two orders of magnitude

on the order of 1 g/cm<sup>3</sup>, two orders of magnitude lower than nylon, nitrocellulose, or PTFE. Autoclavable to 135°C. Excellent chemical compatibility (except ketones, esters, amines, trifluoroacetic acid). See also Immobilon-P and Immobilon-P<sup>32</sup> in the Electrophoresis Equipment section for PVDF Blotting membranes.

Durapore is a registered trademark of Millipore Corp.

Product Number	Port Size (inch)	Diameter (mm)	Flow	Price US \$
P 8074	0.10	47	100	US \$ 55.00
P 1188	0.22	13	100	US \$ 50.00
P 1313		25	100	US \$ 50.00
P 1438		47	100	US \$ 50.00
P 1563		142	50	US \$ 50.00
Z35.871-1		292	25	US \$ 50.00
P 1680	0.45	13	100	US \$ 50.00
P 1813		25	100	US \$ 50.00
P 1938		47	100	US \$ 50.00
P 4313		142	50	US \$ 50.00
Z35.870-3		299	25	US \$ 50.00
P 8848	5	47	100	US \$ 50.00

## WHATMAN QUALITATIVE FILTER PAPERS

WHAT CAN IT TAKE FOR PAPERS

